DOCUMENT RESUME

ED 414 799 HE 030 692

AUTHOR Ware, Thomas E., Jr.; Miller, Michael T.
TITLE Literature Related to College Housing for Adult Undergraduate Students.
PUB DATE 1997-00-00
NOTE 26p.
PUB TYPE Information Analyses (070)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adult Learning; *Adult Students; Age Differences; *College Housing; Demography; Educational Environment; Educational Research; Higher Education; *Nontraditional Students; Student Needs; *Student Personnel Services; *Undergraduate Students

ABSTRACT

This paper examines the literature on residential life and adult education as it applies to undergraduate housing for non-traditional (adult) students. The literature reviewed focuses on the demographics of the adult student population, adult students as learners, and the student affairs needs of adult students. Although the literature related to adult students on campus has grown substantially during the past decade, research on the adult student from a student affairs viewpoint is limited at best. Professionals dealing with campus activities and student life have begun to respond to the needs of adult student, but research in this area is spartan. Of particular note in the literature is the lack of attention to the lifestyles of adult students, including housing needs, campus involvement, and family relationships. (Contains 32 references.) (MDM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 414 799

Literature Related to College Housing for Adult Undergraduate Students

Thomas E. Ware, Jr., Ed.D.
Resident Director
Mallet Men's Honors Residence Program
Research Associate
Institute for Higher Education Research and Service
University of Alabama
Tuscaloosa, AL 35487
(205) 348-6022

Michael T. Miller, Ed.D.
Associate Professor
Higher Education Administration Program
Box 870302
University of Alabama
Tuscaloosa, AL 35487
(205) 348-1170

LF 6 30 G42

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Thomas E. Ware, Jr.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

Abstract

The number of adult students on college campuses has increased dramatically during the past 15 years. As a result of this growth, institutions have been forced to respond by modifying and adapting services they provide to students. One area which has rarely been addressed in practice, and in the literature base, is residential life. Housing and residential life programs play key roles in the recruitment and retention of students, and have the potential to create more meaningful and educational experiences for adult undergraduate students. This literature review traces the dominant works on residential life and adult education as related adult undergraduate housing.

The Adult Student Population

Academic integration has been demonstrated to be a key factor in the success of adult students. Cleveland-Innes (1994) tested Tinto's model of student persistence at a large commuter university to determine if there were differences in persistence between traditional and non-traditional students. Tinto's model held that student persistence is the result of an interaction between the students' characteristics and the campus's social and academic systems. Cleveland-Innes found that the non-traditional students were less likely to withdraw if they felt integrated into the academic community. Social integration was found to be of less importance since the campus was composed primarily of commuter students.

McCormick (1993) conducted a survey of adult students attending evening classes. Of the respondents, a significant portion were pursuing baccalaureate degrees (58.5%). Another 22% were pursuing associate degrees. A pattern of low social integration among the participants was noted, and only 11.2% could name their representative in the student government association. The students overwhelmingly cited the need for increased course availability during the evening hours (88.9%). Other expressed needs were for increased campus security (85.3%) and their own representative in student government (44.1%).

O'Connor's (1994) case study at Kent University yielded the following profile of adult students. They were pragmatic in their outlook and were

primarily part-time students. They usually had familial responsibilities and worked full-time. Their visits to campus centered around academic or administrative concerns rather than social or athletic activities. These adult students largely financed their own education, demonstrated a high degree of self-discipline and organization, and placed a great deal of emphasis on grades.

The participants in O'Connor's (1994) study had several suggestions to improve the academic experience for adult students. First, they recommend that the university increase the availability of services and expand the hours of office operation. Second, class scheduling should incorporate more evening classes. Third, professors should be made more sensitive to the roles of students outside the classroom. Finally, there should be more contact with professors instead of graduate assistants.

Kasworm (1993) wrote that higher education administrators could aid adult students through empowerment by treating them as equals in the academic environment. They should not be subject to the procedures imposed on youthful undergraduates. Administrators need to become cognizant of the life circumstances faced by adult students and to provide ways to facilitate their academic success.

Slotnick (1993) found that adult students spent less time studying and attending classes than their younger adult counterparts. Adult students reported having to allocate time for employment and domestic responsibilities. Adult students were found to attend college primarily to change careers, gain new

skills, enhance their current career, enhance their lives, and respond to changes in their lives. Adult students were less likely to attend college in order to obtain a first career.

Slotnick (1993) offered several recommendations to faculty with regard to adult students. First, faculty should demonstrate the range of ways knowledge could be applied. The faculty should involve the students in their own learning, and passivity of the student should be avoided. Faculty should be aware of adult needs when utilizing group activities. Adults have been found to be less reliant on groups, and group activities outside the class can be difficult to arrange for the students. Adult students are typically intolerant of group members who do not do their share of the work. Faculty should be aware of the characteristics that adult students expect them to exhibit. Faculty should be well-organized, prepared, knowledgeable, and excellent communicators.

Benshoff and Lewis (1992) characterized adult students as having a strong consumer orientation, experiencing multiple non-school-related commitments, lacking a particular age cohort, and possessing a limited social acceptability for their student status. Career changes, life transitions, changes in leisure time, and a need for self-fulfillment were identified as reasons for returning to school. Adult students required assistance in attaining self-confidence to succeed in school, training in the study skills, and increased opportunities for peer interaction. Registration, advising, parking, class scheduling, financial aid, and housing were just some areas that required changes to meet adult student needs.

Faculty tend to hold a higher regard for nontraditional students. Raven and Jimmerson (1992) conducted a study of faculty and student perceptions of nontraditional students and classroom learning. The researchers found that the faculty of the sample institution had a more positive attitude toward nontraditional students than their traditionally-aged counterparts. Nontraditional students were viewed as competent, demanding, and goal-oriented. The study also revealed that the faculty possessed a high awareness of the needs of adult learners.

Education in a four-year university can have a positive impact on adult learners. Cupp (1991) found that adult students were more likely to use the terms "confident," "competent," "accomplishment," "discovery of self," and the "courage to try new things" in describing their experience at a traditional university. Students also reported that some of their needs were not being met by the institution and faculty. Registration was one problem indicated in the study. Another problem cited was the lack of sensitivity from faculty to the students' responsibilities outside the classroom.

Spanard (1990) formulated a model for adult re-entry into college. The model applied to "stop-outs." A "stop-out" is a student who attends college for a while and then quits for a while due to various factors. The model began with a student's desire to change his or her life situation. This feeling could lead the student to make other life changes, to take no action, or to re-enter higher education. If the student chooses to re-enter higher education, he or she may be

placed in one of two programs. One is known as the "either/or" program, where the student is combined with traditional students and is forced to survive on his or her own. The other program identified was the "and also" program where the student receives services unique to his or her needs that can enhance the chance of degree completion. From either of these programs the student may choose to leave college or stay until graduation. If the student chooses to leave, the model loops back to the point where the intent to change is faced, which offers the same choices at the beginning of the model.

Women constitute a significant percentage of adult students. Bruce (1990) studied adult women students at five institutions in the United States. The typical female adult student in the study was 31-40 years old, married, employed full-time, and attended school part-time. There was almost the same percentage of women attending school who had dependent children. The highest level of education gained was at the high school to baccalaureate level. Most were seeking bachelor degrees or master degrees. The primary majors for these students were education and business. Most chose to return to school for career advancement and/or self-fulfillment reasons. The services most often requested by these students were more frequent course offerings, job placement assistance, and child care. The students cited advising and flexible class scheduling as the most beneficial current services they received.

The Massachusetts State Board of Regents of Higher Education (1989) released the results of its Division of Continuing Education Student survey,

which provided insight into the demographics of students enrolled in one state's adult education program. Most of the continuing education students were women (55.8%), white (89.2%), and employed (91.4%). Nearly half, 43.4%, of the students were 30 years old or older. A large number (70.4%) of the respondents paid for the courses out of their salaries and had a median income in the range of $15,000 to $19,000 annually. A majority of the students did not take classes during the daytime (91.2%). A majority of these students planned to get a degree and chose their particular institution because of location, affordability, and course scheduling.

Glass and Rose (1987) identified several barriers to degree completion faced by adult women students. Many faced lack of support from family and friends. They were intimidated by their instructors and felt that they were not viewed as serious students. They also potentially suffered from self-doubt and guilt. Financial problems were another possible barrier to successful degree completion. The women who were successful in their academic endeavors had increased self-worth and feelings of self-confidence. Methods to help adult women achieve this success included special orientation sessions, CLEP credit for learning that may have occurred during their adult life experience, and peer support groups.

The adult student may drop out of college for several reasons. Metzner and Bean (1987) found that these reasons were related to GPA and a lack of commitment to the institution. Factors related to adult student dropout were

number of hours enrolled, satisfaction with the student role, utility of education upon career advancement, and age. Most students in the study dropped out because of academic reasons or a lack of institutional commitment. Few left because of social concerns.

Metzner and Bean (1987) made several suggestions for improvement in student retention. Institutions should provide remedial help for students lacking in skills. Career counseling and teaching should include methods that enhance student perceptions of educational value, advising should be improved, and efforts to decrease absenteeism should be increased.

Steltenpohl and Shipton (1986) implemented a course designed to help the adult student successfully make the transition into college. The course allowed the students to address their individual educational needs, with the goals of the course being to help adult students overcome their feelings of inadequacy and to explore the meaning of higher education. The students became acquainted with the learning process.

Older students have been thought of as detached from the rest of the campus. Copland-Wood (1985) tested Chickering's (1969) notion that adult commuter students were less involved on campus than their younger, traditional counterparts and found evidence in support of their theory. These students were less likely to study on campus, use the library facilities, engage in social activities centered around the campus, and were not frequently involved in student organizations. A feeling of detachment or isolation was noted among

adult students. The adult students listed better parking, more flexible scheduling, and improved communications as some of their pressing needs.

Epstein (1984) conducted a study which profiled adult students 36 years old and older. The sample consisted of 24 adult students at a state-supported, urban university. The participants were interviewed, audiotaped, and categorized. The typical adult student was a 44 year-old white female, married, and enrolled part-time. The student was most likely a transfer student attending college because of some critical life change. The motivation for seeking higher education was interest in life-long learning and some possibility for career advancement. Most participants cited tuition costs, program availability, and scheduling as their reasons for choosing their particular institution.

Adults as Learners

Adult learners are different from their traditional age counterparts. Donaldson, Flannery, and Ross-Gordon (1993) combined three sets of data to produce a study of the perceptions of what effective teaching is to adult students. The participants were asked to rank in order of importance the qualities they preferred in instructors. The students rated the qualities of being knowledgeable, motivating, concerned about student learning, and presentation skills much higher than warmth, availability, and openness to questions. The prime difference with respect to age was that older students expected the

instructor to utilize motivating teaching methods, while younger students desired instructors who helped in the task of being a student.

Cardozier (1993) described the innovative programs used at the University of Texas of the Permian Basin. UTPB was established as an upper-level and graduate institution in one of the oil-rich parts of Texas. The institution was primarily composed of commuter students with an average age of 30 years old. With adult students in mind, the administration of the institution required that faculty teach at least one course per year where the students used self-paced instruction. Some problems were associated with self-paced instruction such as increased demand on faculty time and students taking several semesters to complete courses. Contract study was also utilized with results and deficiencies similar to self-paced instruction.

Confessore (1993) challenged some of the long-held beliefs educators have held regarding interaction in mixed-age classrooms. By studying the type and nature of interaction in the classroom, Confessore suggested that having adult students actively involved in classroom discussions did not serve to increase the cognitive level of discourse. Most of the interaction was of a factual rather than cognitive nature. Adult students tended to dominate discussion during the factual interactions, but younger students tended to be more involved during the cognitive discussions. Confessore suggested that adult discussion domination could adversely affect younger students' course satisfaction through the decrease in the opportunity to participate in interaction. Confessore concluded that

andragogical practices were not being used in the mixed-age classrooms and may not be the best approach in any case. The study also suggested that while instructors thought they made accommodations for the adult learners, their teaching practices were rarely altered.

Bohlin (1993) found that a difference did exist between the learning motivational factors of college students and adult students. Bohlin surveyed 183 undergraduate and graduate students at four medium-sized state universities and 147 students enrolled in community adult education classes. The teaching strategies reported by the college students as most important for their interest in learning were the clarity of the requirements for success, the utility of the information personally, and the benefit the knowledge acquired in class would have. The adult education students cited strategies that gave personal satisfaction, provided content related to goals and expectations, and created a relaxed class atmosphere.

Teaching in a mixed-age classroom can provide a challenge to instructors. Bishop-Clark and Lynch (1992) described some of these challenges as feelings of discomfort among older students, different learning styles, and hostility between age groups. The older students were viewed as being on friendlier terms with the instructor by younger students. Older students were sometimes viewed as authorities by the younger students with regard to course material. The perception that older students have an easier road to academic success was identified as potentially contributing to hostility between age groups. Some of

the strategies suggested by Bishop-Clark and Lynch were to encourage personal contact; allow the students to get to know one another; discuss differences by allowing students to exchange motivations, objectives, and concerns about one another; use peer reviews; and focus on personalities rather than age.

Graham (1989) conducted a comprehensive study of the outcomes of adult learners from their college experience. The study encompassed the responses of 7,577 adults who had recently received bachelor degrees. The college outcomes for adult learners identified were the five factors of self-directed learning, human/artistic development, communication skills, logic/problem solving, and consumer awareness. Some of the outcomes identified for students involved in self-directed learning were being able to work independently, personal individual learning, effective time management, and persistence. For the students' human/artistic development, human-environmental interaction, multiculturalism, and artistic appreciation were important outcomes. Communication outcomes included speaking and writing effectively. Problem-solving outcomes involved understanding and applying scientific principles and methods, as well as mathematics. Managing personal finances and consumer issues were important factors in the consumer awareness realm.

Comadena (1989) conducted a comparative study of communication traits and student learning between traditional undergraduate students and adult learners. Comadena identified the three traits to be tested in the study as communication apprehension, willingness to communicate, and communication

competence. The survey included 165 traditional age undergraduates and 108 adult students at a large midwestern university. Comadena found that there were no significant differences between the two groups with regard to all three traits. There was a significant difference in communication apprehension and interaction involvement based on grade point average among traditional age students. Students with higher grade point averages were more likely to be involved competently with less apprehension. However, there was no significant difference in these traits among adult students based on grade point average.

Check (1984) studied the teaching and learning preferences of adult students. A survey of 119 adult students enrolled in an adult learner course found that 75% of the students preferred an eclectic approach to teaching and learning. Lecture with some discussion was the favored presentation method cited by 90% of the respondents. Structure was also very important, as 80% desired a syllabus from the course instructor while 60% wanted an outline for each lecture. The concept of andragogy was important to 50% of the participants since they felt that course planning was an activity that should be shared between the instructor and student. Over 75% of the students preferred to have examinations, particularly those exams which included both objective and subjective questions.

The Student Affairs Needs of Adult Students

Academic advising is an issue of importance to adult students. Giczkowski and Allen (1994) wrote that these advisors must keep several notions in mind when dealing with adult students. For example, these students usually come from one of four academic backgrounds. Some of these students dropped out of a four-year college degree program, some have earned associates degrees from junior colleges, and others have taken courses piecemeal at several community colleges. A few of the students have repeatedly dropped out of re-entry programs. Adult students have responsibilities that traditional students have yet to face. Adult students are less likely to view faculty as a role model since they are past their formative years when role models are important to development. The advisors should anticipate the students' discussion of personal problems and place all alternatives available to the students before them.

Ryder, Bowman, and Newman (1994) conducted a survey of the barriers adult students perceived that hindered their degree completion. The barriers most often cited by students were finances, academic advising, time management, administrative problems, and lack of academic preparation. One recommendation offered by Ryder, Bowman, and Newman for student service professionals with regard to adult students were to improve academic advising by creating a long-range goal plan with the student. Academic advisors were strongly encouraged to recognize the differences between adult and traditional students and make adjustments accordingly. To assist the students with

administrative problems, they suggested that office hours should be expanded to meet the needs of non-traditional students. An ombudsman office could be created to help these students deal with administrative red tape. The financial situation of adult students could be improved through the use of better long-range planning between the student and the financial aid office. A lack of information with regard to financial aid was considered a prime difficulty to student matriculation.

Whitt (1994) wrote that student involvement is crucial to student success, even for adult students. These out-of-class activities often lead to improved self-confidence as well as an avenue for support that adult students need. Often adult students lack support from home or co-workers, but find support from their peers in the classroom, which can make the difference between academic success or failure. Whitt argued that there are ways that higher education institutions can facilitate adult student involvement. One way identified was to provide orientation programs for adult students and their family members. Reasonably priced child care could also be offered, or the school could provide family involvement in campus activities for very little cost. Information about campus activities should be offered through avenues that are convenient for the students, which means that it is available after normal business hours. Adult organizations should be encouraged which plan activities for adult students and their families. Activities could be scheduled at times convenient for adult students. Finally, Whitt contended that academic support services for adult

students should be geared toward helping students who have been away from formal education for a long time. For example, tutoring, homework assistance, and advising could be provided to assist these students.

College orientation can play a major factor in the academic success of adult students. Singer (1993) described a pilot program at the University of Louisville centered around adult student orientation programs and offered the following recommendations. First, child care should be provided during the orientation program as well as the school year. Second, orientation programs should be offered with flexible scheduling, including morning, evening, and weekend sessions. The incoming adult students should be exposed to successful adult students by adding representatives of these students to the paraprofessional orientation staff. The orientation program should include activities for families as a whole, and the orientation staff should recognize the mature nature of adult learners and treat them as highly motivated individuals.

Bowden and Heritage (1992) described a successful administrative response to the needs of adult students at Middle Tennessee State University. After the completion of an adult student survey, university administrators created the Adult Service Center, a clearinghouse for information and support service for adult students. Over the course of a year, the center established a support system for adult learners, assisted adult students in locating and securing financial aid, extended book store hours, and extended the office hours of selected campus administrative offices. Certain services were made available

to adult students by the center, including substance abuse support, seminars in the use of computers, stress management seminars, study skill seminars, career counseling, orientation programs, and referral to guidance services within the university. Many of these services were provided through the use of adult student volunteers.

Byrd (1990) categorized the perceived barriers of adult students in a study of small liberal arts colleges in the Southeast. The barriers were to be divided into three types. Situational barriers were those that stemmed from the student's own life. Institutional barriers were those relating to the school environment, particularly policies and procedures that were geared toward traditional students. Dispositional barriers were those that were based on the student's outlook on learning. The most common barriers reported in the study were lack of time, cost, home responsibilities, lack of energy, and job responsibilities. Some suggested methods to help adult students were the creation of a special adult student association, telephone registration, evening office hours, improved orientation, and special on-campus living opportunities.

Puryear and McDaniels (1990) found that universities were beginning to address the concerns of adult students. The study was based on data gathered from 226 private four-year colleges in the Southeast. Of the participating colleges, 44% offered credit for life/work experiences, 81% were GED acceptable, 51% provided academic advisors, and 62% waived ACT or SAT scores for adult students. In terms of services, 56% of the colleges offered an

adult degree program, 59% had an adult center or office, 87% offered night classes, 50% offered off-campus classes, and 52% provided workshops and seminars for adults. Some of the areas where improvements could be made were in day care and single parent programs. Respondents (69%) also indicated an increase in non-traditional students over the previous five years.

Discussion

Adult undergraduate students comprise a growing segment of the college population, and unless institutions respond to their unique needs, they will be non-competitive in attracting and retaining this substantial client base. Institutions have generally responded to adult students through the scheduling of academic offerings, but are increasingly aware of the differences between traditional and non-traditional student needs. Adult learners vary not only in their approach to the teaching and learning process, but perhaps more importantly, in their needs for an inviting collegiate environment.

Literature related to adult students on campus has grown substantially during the past decade, a trend reflective of the general perception of importance this student population has an institutions. Despite this surge in academic attention, the adult student from a student affairs viewpoint is limited at best. Professionals dealing with campus activities and student life have begun to respond to adult student needs, but research in the area is spartan, at best.

Of particular note in the literature base is a lack of attention to the lifestyles of adult students. This primary purpose on campus, family relationships and orientation, and involvement intensity are all in need of close attention. Housing opportunities are also of special importance, as the reliance on adult students as a considerable market of potential students enters a phase of recruitment and geographic displacement. In bringing adult undergraduates to campus from far away places, institutions must be prepared to respond to their housing needs. Only in doing so will institutions demonstrate their acceptance of adult students and their commitment to serving their unique needs.

Based on this cursory review of literature, several clear directions for further research are alluded to. These directions are primarily related to the campus ecology for the adult student population, but also provide an initial step in the direction of integrating the academic and academic-support functions of the institution. This integration, which has been successfully demonstrated with undergraduate students, holds the future of the adult student market.

References

Bishop-Clark, C., & Lynch, J. M. (1992). The mixed-age college classroom. College Teaching, 40, 114-117.

Benshoff, J. M., & Lewis, H. A. (1992). Nontraditional college students. Ann Arbor, MI: University of Michigan, School of Education.

Bohlin, R. M. (1993). Factor analyses of the instructional motivation needs of adult learners. Paper presented at the Convention of the Association for Educational Communications and Technology, New Orleans, LA.

Bowden, S. D., & Heritage, J. (1992). Implications of increased enrollment of adult learners in colleges and universities. Paper presented at the Conference of the Southeastern Psychological Association, Knoxville, TN.

Bruce, W. (1990). A profile of adult women students: The emerging cohort in colleges and universities. Paper presented at the Annual Conference of the National Association for Women's Deans, Administrators, and Counselors, Nashville, TN.

Byrd, S. R. (1990). Perceptions of the barriers to undergraduate education by nontraditional students at selected nonpublic, liberal arts institutions in the Mid-South. Paper presented at the Annual Conference of the Mid-South Educational Research Institutions, New Orleans.

Cardozier, V. R. (1993). University of Texas of the Permian Basin. New Directions for Higher Education, Report No. 82, 89-104.

Check, J. F. (1984). Teaching-learning preferences of the adult learner. Paper presented at the National Adult Education Conference, Louisville, KY.

Chickering, A. W. (1969). Education and identity. San Francisco, CA: Jossey-Bass.

Cleveland-Innes, M. (1994). Adult student drop-out at postsecondary institutions. Review of Higher Education, 17, 423-445.

Comadena, M. E. (1989). Communication traits and student learning: A comparative study of the traditional undergraduate students and adult learners. Paper presented at the Annual Meeting of the International Communication Association, San Francisco, CA.

Confessore, S. J. (1993). What direct observation discloses about who is best served in the multi-age classroom. Continuing Higher Education Review, 57, 58-71.

Copland-Wood, B. A. (1985). Older commuter students and the collegiate experience: Involved or detached? Paper presented at the Conference of the American Association for Adult and Continuing Education, Milwaukee, WI.

Cupp, L. B. (1991). Acquiring new perspectives: The impact of education on adult students in a traditional university. Paper presented at the Annual Meeting of the American Association for Adult and Continuing Education, Montreal, Canada.

Donaldson, J. F., Flannery, D., & Ross-Gordon, J. (1993). A triangulated study comparing adult college students' perceptions of effective teaching with those of traditional students. Continuing Higher Education Review, 57, 147-65.

Epstein, H. V. (1984). The older college student: A changing tradition. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

Giczkowski, W., & Allen, A. T. (1994). Advising adult students requires special attention. Adult Learning, 5, 14-15.

Glass, J.C., & Rose, A. R. (1987). Reentry women: A growing and unique college population. NASPA Journal, 25, 110-19.

Graham, S. W. (1989). Assessing the learning outcomes for adults participating in formal credit programs. Continuing Higher Education Review, 53, 73-85.

Kasworm, C. (1993). An alternative perspective on empowerment of adult undergraduates. Contemporary Education, 64, 162-65.

Massachusetts State Board of Regents of Higher Education. (1989). DCE student profile: A report on the results from the division of continuing education student survey.

McCormick, C. (1993). The evening student survey. Paper presented at the annual meeting of the Southeastern Psychological Association, Atlanta, GA.

Metzner, B. S., & Bean, J. P. (1987). The estimation of a conceptual model of nontraditional undergraduate student attrition. Research in Higher Education, 27, 15-38.

O'Connor, P. J. (1994). The needs of adult university students: A case study. College and University, 69, 84-86.

Puryear, A., & McDaniels, C. (1990). Nontraditional students: How postsecondary institutions are meeting the challenge. Journal of Career Development, 16, 195-202

Raven, M. F., & Jimmerson, R. M. (1992). Perceptions of nontraditional students, teaching and learning held by faculty and students. Continuing Higher Education Review, 56, 137-54.

Ryder, R. A., Bowman, R. L., & Newman, P. P. (1994). Nontraditional students: Perceived barriers to degree completion. College Student Affairs Journal, 13, 5-13.

Singer, T. S. (1993). Orienting adult learners to college. College Student Affairs Journal, 12, 60-66.

Slotnick, H. B. (1993). Adult learners on campus. Pennsylvania, PA: Falmer Press.

Spanard, J. A. (1990). Beyond intent: Reentering college to complete the degree. Review of Educational Research, 60, 309-44.

Steltenpohl, E., & Shipton, J. (1986). Facilitating a successful transition to college for adults. Journal of Higher Education, 57, 637-58.

Whitt, E. J. (1994). Encouraging adult learner involvement. NASPA Journal, 31, 309-18.